TWR-77365 ECS SS12941







Reusable Solid Rocket Motor STS-105 Flight Readiness Review/CoFR

Motor Set RSRM-81

1 August 2001

Presented by Terry Boardman



THIOKOL PROPULSION

P.O. Box 707, Brigham City, UT 84302-0707 (435) 863-3511







STS-105 (RSRM-81)

Agenda

Flight Readiness Review/CoFR

- 1.0 Previous Flight Assessment—STS-104—No Issues
- 2.0 Certification Status—No Constraints
- 3.0 Changes Since Previous Flight—None
- 4.0 Configuration Inspection
 - 4.1 As-Built Versus As-Designed, Hardware, and Closeout Photo Review Status—No Issues
 - 4.2 Hardware Changeouts Since ET/SRB Mate Review—None
- 5.0 SMRB Nonconformances—None
- 6.0 Technical Issues/Special Topics—None
- 7.0 Readiness Assessment
- Backup LCC and Contingency Temperatures for STS-105









STS-105 (RSRM-81)

Previous Flight Assessment—STS-104

1.0-1

Disassembly Evaluation Summary—Status of Disassembly Activity

KSC Operations	LH RSRM	RH RSRM	Remarks			
Initial LH/RH SRB viewing *	Complete	Complete				
SRB/RSRM walkaround assessment *	Complete	Complete				
Demate/evaluate aft exit cone (AEC) *	Complete	Complete				
Remove/evaluate S&A and OPTs *	Complete	Complete				
Remove/evaluate nozzle *	Complete	Complete				
Remove/evaluate stiffener rings/stubs	Complete	Complete				
Remove/evaluate igniter *	Complete	Complete				
Demate/evaluate field joints/evaluate insulation *	Complete	Complete				
Utah Operations						
Disassemble/evaluate nozzle (joint No. 4 and 5) *	Complete	Complete				
Disassemble/evaluate nozzle (joint No. 2 and 3) *	Complete	Complete				
Disassemble/evaluate S&A *	Complete	Complete				
Washout nozzle phenolics	30 Aug 2001	30 Aug 2001				
Washout nozzle AEC phenolics	13 Sep 2001	13 Sep 2001				
Measure/evaluate aft dome and RH segment insulation	21 Dec 2001	21 Dec 2001				
Measure/evaluate igniter insulation	N/A	N/A				

^{*} RSRM Project committed to complete prior to next launch

No constraints to STS-105 flight







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STS-105 Readiness Assessment

Pending satisfactory completion of normal operations flow (per OMRSD), the RSRM hardware is ready to support flight for mission

STS – *105*

1 August 2001

/s/ T. A. Boardman

T. A. Boardman RSRM Chief Engineer Thiokol

/s/ H. L. Reed

H. L. Reed RSRM Program Office Thiokol



/s/ T. Williams (for)

S. F. Cash Chief Engineer, RSRM Project NASA, MSFC

/s/ M. U. Rudolphi

M. U. Rudolphi Manager RSRM Project Office NASA, MSFC







STS-105 (RSRM-81)

Current Flight Predictions

Backup-1

LCC and Contingency Temperatures for STS-105

	Heater Location	<u>LCC</u>	Minimum Allowable Sensor Temperature*	
			<u>LH</u>	<u>RH</u>
	Igniter	74°F	72°F	72°F
	Forward Field Joint	80°F	72°F	69°F
H	Center Field Joint	80°F	68°F	68°F
	Aft Field Joint	80°F	72°F	73°F
	Nozzle-to-Case Joint	75°F	68°F	71°F

*Launch commit criteria (LCC) contingency temperature in the event of heater failure

Note: Calculation includes all standard repair conditions

